

Oldenlandia gibsonii (Rubiaceae: Hedyotideae), a new species from south east Queensland

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Summary

Halford, D.A. (1999). *Oldenlandia gibsonii* (Rubiaceae: Hedyotideae), a new species from south east Queensland. *Austrobaileya* 5(2): 337-339. *Oldenlandia gibsonii* is described and notes are provided on its habitat, distribution and conservation status.

Key words: Queensland, Rubiaceae, *Oldenlandia gibsonii*

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Introduction

This new species of *Oldenlandia* was first brought to my attention in 1992 when Norm Gibson, a keen naturalist from Gladstone, sent to the Queensland Herbarium for identification a specimen of this species that he had collected from Wietalaba State Forest south west of Gladstone. This first collection had only old fruit on it but was sufficient to show that the plant represented either a disjunct population of *O. polyclada* (F.Muell.) F.Muell. from north Queensland or an undescribed species closely related to *O. polyclada*. Since then more material of it has become available revealing that the plant warrants recognition as a distinct species.

***Oldenlandia gibsonii* Halford sp. nov.** arcte affinis *O. polycladae* (F.Muell.) F.Muell. autem ramificatione divaricata, foliis parvioribus (3–7 x 1–2 mm non 7–40 x 2–6 mm), pedicellis brevioribus (1–3 mm non 3–6 mm longis), calycis lobis parvioribus (0.1–1.0 mm non 2.0–8.0 mm longis), floribus semper solitariis in foliorum axillis (non solitariis vel in fasciculis 2–8 floris) differt. **Typus:** Queensland. PORT CURTIS DISTRICT: State Forest 583 Wietalaba, 24°17'S 151°13'E, 23 May 1996, *P.I. Forster* PIF19164 (holo: BRI; iso: BRI, CANB, K, MEL, MO, NSW, QRS distribuendi).

Oldenlandia sp. (Wietalaba N.Gibson 1344) in Henderson (1997).

Woody herbaceous perennial, densely intricately branched, to 1 m high, with thin, greyish, papery bark on mature stems; branchlets divaricate at c. 80 degrees, quadrangular when young becoming rounded with age, hispidulous; axillary branchlets short, persistent after senescence giving the plant a spinose appearance. Leaves opposite, appearing fasciculate on older branches due the short axillary branchlets, subsessile; lamina narrowly oblong to oblong-elliptic, 3–7 mm long, 1–2 mm wide, discolorous, glabrous or with minute scabrous hairs above, glabrous or sparsely hispidulous below, attenuate at base, obtuse, subacute or sometimes mucronulate at apex, with midrib prominent below and margins recurved when dry. Stipule sheath c. 1 mm long, hispidulous, produced into triangular lobe; margin fimbriate. Flowers solitary in penultimate leaf axils, appearing terminal by abortion or reduction of terminal shoot; pedicels slender, 1–3 mm long, glabrous or hispidulous. Hypanthium subglobose, c. 1 mm diameter, glabrous or sparsely hispidulous; calyx lobes broadly triangular, 0.6–1.0 mm long, obtuse to subacute at apex, joined at the base into free tube c. 1 mm long; margins entire. Corolla cream with lilac tinge and faint lilac blotches in throat, infundibular, glabrous; tube 4–5 mm long; lobes reflexed, triangular, 4–5 mm long. Stamens exerted; filaments 0.5–1.0 mm long; anthers linear-oblong, c. 2

mm long. Ovules c. 25–35 per locule. Style exerted, 6–7 mm long; stigma bifid; lobes linear, c. 2 mm long, reflexed. Capsule subglobose, c. 2 mm diameter, glabrous or subglabrous, not markedly furrowed along dissepiment; calyx lobes spreading; beak c. 1 mm long, rounded, not protruding above calyx lobes. Seeds numerous, depressed obconic or irregularly polygonal, c. 0.5 mm long; testa light brown, reticulate-areolate.

Selected specimens: Queensland. PORT CURTIS DISTRICT: State Forest 583 Wietalaba, 32 km S of Calliope, Jun 1992, Gibson TO11315 (BRI); *ditto*, Nov 1993, Gibson 1343 (BRI, NSW); *ditto*, Apr 1994, Gibson 1344 (BRI); State Forest 583 Wietalaba, Dec 1995, Forster PIF18265, Orford & Tucker (BRI, MEL, QRS.); *ditto*, May 1996, Forster PIF19165 (BRI); Wietalaba State Forest, c. 31 km S of Calliope, Nov 1997, Halford Q3445 & Snow (BRI).

Distribution and habitat: *O. gibsonii* is known only from State Forest 583, 35 km west of Miriam Vale in central Queensland. It grows on reddish brown loams in Araucarian microphyll vineforest dominated by *Choricarpia subargentea* (C.T.White) L.A.S.Johnson, *Backhousia kingii* Guymer and *Barklya syringifolia* F. Muell.

Phenology: Flowers have been recorded in May and November; fruits have been recorded in April, November and December.

Affinities: *O. gibsonii* is closely related to *O. polyclada* but differs from that by its divaricate branching, smaller leaves (3–7 x 1–2 mm compared to 7–40 x 2–6 mm), shorter pedicels (1–3 mm long compared to 3–6 mm long), smaller calyx lobes (0.1–1.0 mm long compared to 2.0–8.0 mm long) and flowers always being solitary in leaf axils (compared to flowers solitary or being in 2–8-flowered fascicles in *O. polyclada*).

Conservation status: *Oldenlandia gibsonii* is known only from the type locality in State Forest 583 in central Queensland. The total known population of this species is estimated to consist of several thousand individuals. Actions are currently being undertaken to insure that the conservation of the site is secured. The recommended conservation status for this species as defined under the Queensland *Nature Conservation Act 1992* is Endangered (E).

Etymology: This species is named in honour of Norman Gibson, formerly of Gladstone, who brought this species to my attention.

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References

- HENDERSON, R.J.F. (ed.) (1997). *Queensland Vascular Plants: Names and Distribution*. Brisbane: Queensland Department of Environment.



Fig. 1. *Oldenlandia gibsonii*. A. branch $\times 1$. B. detail of part of a branch with short lateral branchlet and flower $\times 5$. C. lateral view of fruit $\times 10$. A & B, *Halford* et al. Q3445 (BRI); C, *Forster* et al. PIF18265 (BRI).